

Quest 35

rotation

reflection

translation

dilation

translation

$$(x, y) \rightarrow (x+4, y-2)$$

Vector  $\vec{AB}$

$$\langle x_2 - x_1, y_2 - y_1 \rangle$$

reflection

x-axis  $(a, b) \rightarrow (a, -b)$

y-axis  $(a, b) \rightarrow (-a, b)$

$y = x$   $(a, b) \rightarrow (b, a)$

$y = -x$   $(a, b) \rightarrow (-b, -a)$

rotation

$90^\circ$   $(a, b) \rightarrow (-b, a)$

$180^\circ$   $(a, b) \rightarrow (-a, -b)$

$270^\circ$   $(a, b) \rightarrow (b, -a)$

Dilation

origin (multiply)

dilate about a point  
other than origin